

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-40. (cancelled)

41. (currently amended) A medical device including a reinforcing member, the medical device formed by the following process:

providing one or more metallic filaments adapted and configured to be made into the reinforcing member for the medical device, the one or more metallic filaments including a metallic surface having a portion with an initial surface area;

treating at least the portion of the surface of the one or more metallic filaments to provide a final surface area that is greater than the initial surface area;

creating the reinforcing member using the one or more metallic filaments; and

incorporating the reinforcing member into the construction of the medical device,

wherein the one or more metallic filaments each have a thickness and wherein the portion extends along each of the one or more metallic filament for a length that is at least twice the thickness of the filament and wherein the portion encircles the metallic filament for the length,

wherein the portion has a profile that is constant along the length.

42. (original) The medical device of claim 41, wherein the medical device is a catheter.

43. (previously presented) The medical device of claim 41, wherein the reinforcing member includes an outer surface, an inner surface, and a lumen extending there through.

44. (previously presented) The medical device of claim 43, wherein incorporating the reinforcing member into the construction of the medical device includes connecting an outer layer to the outer surface of the reinforcing member.

45. (original) The medical device of claim 44, wherein the outer layer comprises a polymer material.

46. (original) The medical device of claim 43, wherein incorporating the reinforcing member into the construction of the medical device includes connecting an inner layer to the inner surface of the reinforcing structure.

47. (original) The medical device of claim 46, wherein the inner layer comprises a polymer material.

48. (currently amended) A medical device comprising:
a reinforcing member including a metallic filament that includes a metallic surface that includes a portion that has been treated to provide an increased surface area relative to a surface area of the portion prior to treatment;

one or more polymer structures connected to the treated portion of the surface of the metallic filament;

wherein the increased surface area on the portion of the surface of the metallic filament of the reinforcing member allows for a mechanical bond between the reinforcing member and the one or more polymer structures,

wherein the portion includes a majority of the surface area of the metallic filament.

49. (original) The medical device of claim 48, wherein the medical device is a catheter.

50. (original) The medical device of claim 48, wherein the reinforcing member includes an outer surface, an inner surface, and a lumen extending there through.

51. (previously presented) The medical device of claim 50, wherein the one or more polymer structures comprises an outer polymer layer connected to the outer surface of the tubular reinforcing member.

52. (previously presented) The medical device of claim 50, wherein the one or more polymer structures comprises an inner polymer layer connected to the inner surface of the tubular reinforcing member.

53. (currently amended) A catheter comprising an elongated tubular body having a proximal portion, a distal portion, and a lumen extending there through, the tubular body comprising:

a metallic reinforcing member including a metallic surface, wherein at least a portion of the surface has been treated to provide an increased surface area relative to a surface area of the portion prior to treatment, wherein the treatment of the surface to provide an increased surface area of the portion relative to the surface area of the portion prior to treatment consists of treating the portion to provide an increased surface area relative to the surface area of the portion prior to treatment;

a member made of a polymer material, the member being connected to the surface;

wherein increased surface area of the reinforcing member allows the polymer material to create a mechanical bond with the surface.

54. (currently amended) A catheter, comprising:

a braid including a plurality of metallic braid filaments each including a metallic surface, ~~wherein a portion of the surface of the filaments is chemically etched to provide a roughened surface~~ wherein the surfaces of the plurality of the metallic braid filaments are chemically etched to provide a roughened surface such that the chemical etching increases the surface area of the plurality of metallic braid filaments relative to the surface area of the plurality of metallic braid filaments prior to the chemical etching; and

a polymer member connected to the roughened surface.

55. (previously presented) The medical device of claim 41, wherein the reinforcing member includes a braid.

56. (previously presented) The medical device of claim 41, wherein the reinforcing member includes a coil.

57. (new) The medical device of claim 41, wherein a plurality of the one or more metallic filaments each have a diameter and wherein the diameter of each of the plurality is constant along the portion subsequent to the treating step.

58. (new) The medical device of claim 48 wherein the portion is the surface of the metallic filament.